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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,699	09/04/2003	Loren R. Graber	20794-82667	8589
7590 06/18/2004			EXAMINER	
Barnes & Thornburg 600 One Summit Square Fort Wayne, IN 46802			SALDANO, LISA M	
			ART UNIT	PAPER NUMBER
			3673	

DATE MAILED: 06/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/656,699

Applicant(s)

GRABER ET AL.

Examiner

Lisa M. Saldano

Art Unit

3673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 September 2003 and 18 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/16/2004.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 11 and 18 are objected to because of the following informalities:

Regarding claim 11, line 2, the applicant states “wherein the floor comprising removable portions.” It is assumed that the applicant intended to recite *wherein the floor comprises removable portions*.

Regarding claim 18, line 1, the applicant recites that claim 18 depends from claim 18.

This appears to be incorrect. Please correct.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-10 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Becker et al (5,718,537) in view of Thomas (4,104,885).

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Regarding claims 1, 3 and 8, Becker et al disclose a polymeric trench drain 10 that is capable of being used as a liner (see column 1, lines 35-40). Becker et al illustrate a longitudinally extending trough with a floor 14 and sidewalls 12 (see Fig. 1). The sidewalls define a longitudinally extending edge comprising seepage lip 29. Becker et al also disclose first through fourth screw-holes or longitudinally extending receptacles 56 on the outermost-end support ribs 24 with first and second transverse ends. At the male end 16 of the invention, the longitudinally extending sidewalls and floor extend beyond a first open end of one of the receptacles located near crushing rib or section 61. The first transverse open end of the screw-hole or receptacle faces a transverse open of the trough. The screw-holes permit male ends 16 and female ends 18 of adjacent trench drain section to be fastened to one another via connecting screws 58 (see column 4, lines 15-25).

Regarding claim 2, Becker et al disclose a female end 18 comprising receptacles or screw-holes in an outermost-end support rib 24 wherein an end of screw-hole is essentially flush with a second open end of the trough.

Regarding claim 4, the screw-holes permit male ends 16 and female ends 18 of adjacent trench drain sections to be fastened to one another via connecting screws 58 (see column 4, lines 15-25).

Regarding claims 5 and 10, the male end 16 includes a portion of sidewalls 12 and floor 14 and the female end comprises a recessed portion adapted to matingly receive a male end of an adjacent drain. Thereby, portions adjacent trench drains are partially encompassed by other portions through overlapping.

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Regarding claim 6, Becker et al disclose rods or spikes 36 that extend from a sidewall of the trench drain and that are secured to the ground.

However, Becker et al fail to disclose that the receptacles are located on the longitudinally extending edge 29.

Regarding claims 1, 7 and 13, Thomas discloses tunnel lining assembled out of multiple connectable segments wherein each segment has longitudinally receptacles for receiving connecting dowels to hold the segments together (see abstract and Fig.1). The connecting dowels interference fit their respective longitudinally extending receptacles.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the trench drain of Becker et al to incorporate longitudinally receptacles within the longitudinally extending edge of the drain, as well as connecting dowels to fasten abutting segments of the drain, because insertion of connecting members into longitudinally extending receptacles is a functionally equivalent method of fastening adjacent segments in a longitudinally extending trench drain or liner, as taught by Thomas.

Regarding claim 9, once the two adjacent sections of trench drain are abutted together and engaged by means of a connecting dowel, at least some portion of a second trench drain would fit between the longitudinal edge of a first trench drain and the dowel connecting the two.

4. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Becker et al in view of Thomas, as applied to claim 8 above, in further view of Butler (4,741,645).

Becker et al and Thomas disclose the inventions as described above.

However, they fail to disclose removable portion in the floor of the drain.

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Butler discloses a continuous gutter lining 8, which is essentially a liner for a channel (see Figs.8&9). Butler discloses a flange 40 glued to the bottom 43 of the gutter liner in the immediate region of a downspout 36 and a tubular portion 38 that extends downwardly into downspout 36. Butler further discloses that a hole 59 is made into the gutter liner strip such that runoff water can drain into the downspout adapter.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the trench drain of Becker et al to provide holes in the bottom portion, as taught by Butler et al, because the trench drains may, and commonly do, drain into another pipe and out to another part of a larger water collection system. The holes taught by Butler et al provide an opening for the liquid to drain into such a pipe. Furthermore, it would have been obvious to provide a perforated line within the trench drain floor to facilitate removal of a portion of the drain to accommodate such a pipe. In the case that removal of a bottom portion of the drain is not necessary, the trench drain's perforated portion may remain intact without compromising operation of the system.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Akkala et al (5,443,327) and Nienstadt (3,854,292) disclose features that pertain to the present application.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lisa M. Saldano whose telephone number is 703-605-1167. The examiner can normally be reached on Monday-Friday, 8:30am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather C. Shackelford can be reached on 703-308-2978. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

lms



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